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ABSTRACT

This report examines the readiness of Latino (Hispanic descent) high school students for college-level academic work based on their reading comprehension and verbal reasoning skills. Pertinent college admissions test data and educational survey data are reviewed, and findings are discussed from a variety of research fields that sharpen the understanding of factors that can promote or inhibit the development of verbal comprehension and reasoning skills among these students. The analysis of research covers contextual factors, discourse processing, and word recognition factors related to reading comprehension and verbal reasoning performance. Based on the review, it is concluded that coherent approaches are emerging for understanding the reading comprehension and reasoning skills development of Latino students, including the importance of communicative competence, linguistic features of texts, second language learning, comprehension and reasoning strategies, and verbal decoding of English words. The report includes a discussion of questions that need to be pursued in devising effective instruction and interventions based on what the research has revealed. (Contains 37 references.) (NAV)

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RESEARCH REPORT: 13

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VERBAL COMPREHENSION AND REASONING SKILLS OF LATINO HIGH SCHOOL STUDENTS

RICHARD DURAN, RUSSELL REVLIN, AND DALE HAVILL

U.S. DEPARTMENT OF EDUCATION
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Verbal Comprehension and Reasoning Skills of Latino High School Students

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Verbal Comprehension and Reasoning Skills of Latino High School Students

Abstract

This report examines the readiness of Latino high school students for college-level academic work based on their reading comprehension and verbal reasoning skills. We first review pertinent college admissions test data and educational survey data. Next, we go on to discuss findings from a variety of research fields that sharpen our understanding of factors that can promote or inhibit the development of verbal comprehension and reasoning skills among Latino students. Our analysis of research covers contextual factors, discourse processing, and word recognition factors related to reading comprehension and verbal reasoning performance. We conclude with a discussion of some important questions that need to be pursued in devising effective instruction and interventions based on what research has revealed.

INTRODUCTION

In this report we discuss Latino[1] high school students' readiness for college in the areas of English reading comprehension and reasoning skills. We draw attention to two issues: 1) college admissions test scores and educational survey findings on the preparation of Latino students for college-level academic work in the verbal and reasoning areas and 2) research on the academic demands of reading and reasoning activities. We conclude with a discussion of questions that still need to be answered in order to make sense of existing research findings and to devise effective interventions to improve the verbal reasoning skills of Latinos aspiring to attend college.

COLLEGE ADMISSIONS TEST SCORES AND EDUCATIONAL SURVEY DATA

College Board Scholastic Aptitude Test Verbal (SAT-V) scores assess students' general verbal ability. Along with SAT Mathematics (SAT-M) scores and class rank in high school, SAT-V scores have been found to be among the best quantitative predictors of early grades in college (Durán, 1983; Pennock-Roman, 1990). SAT-V test score data for Mexican-American, Puerto Rican, and other Hispanic test takers indicate that the average scores of these students are 50 to 100 points (1/2 to 1 standard deviation) lower than those earned by non-Latino White students. The SAT-V (and SAT-M) scores of Latino students have not shown appreciable growth since the College Board began collecting ethnic/racial identity information on various Hispanic groups in 1976. Indeed, 1994 College Board data indicate that since 1976, the SAT-V scores of Mexican Americans have risen by only 1 point and those of Puerto Rican origin examinees by only 3 points (College Board, 1994). In 1994, the average SAT-V score was 423 for all students regardless of ethnic background; in contrast, Mexican-American examinees earned an average score of 372 and Puerto Ricans an average of 367.

Other data corroborate the differences in verbal ability between Hispanic and non-Hispanic White students prior to the college years. Data from the 1987-88 National Assessment of Educational Progress, for example, indicate that Hispanic high school students have more difficulty in reading comprehension and reasoning than non-Hispanic White students. Over 46% of non-Hispanic White students scored at the *adept* level of reading achievement on the NAEP test as compared to just over 24% of Hispanic students (National Center for Education Statistics, 1991). The *adept* level is defined as being "able to find, understand, summarize, and explain relatively complicated literary and informational material." Latino high school students also lagged behind non-Hispanic White students at the *advanced* level on the NAEP reading assessment. Slightly over 1% of Hispanic students scored at this level as compared to nearly 6% of non-Hispanic White students. The *advanced* level is defined as being "able to understand the links between ideas even when those links are not explicitly stated and to make appropriate generalizations even when the texts lack clear introductions or explanations." Taken at face value, these data suggest that both Latino and non-Hispanic White high school students are sorely underprepared to comprehend written English and to reason in English as would be required in college.

Consistent with test score information, there is evidence that Latinos are not judged as being as academically eligible for college work as non-Latino White students in regions of the country heavily populated with Latinos. For example, a study in California by the California Postsecondary Education Commission (Ratliff & Barker, 1992), which compared college eligibility rates from 1983 to 1990, showed that there was no change during this period in the percentage of Latino high school seniors eligible for the California State College System based on high school grades alone (11.7% in 1983 and 11.4% in 1990). Latino academic eligibility rates for University of California (U.C.) improved marginally from 2.1% in 1983 to 3.9%

in 1990. The disparity in Latino high schools students' academic eligibility for the U.C. system is egregious given that the California Master Plan for Higher Education specifies that the top 12.5% of graduating high school seniors are academically eligible for admission to the U.C. system.

Empirical research findings suggest that Latino 4-year college applicants show self-awareness of limitations in their verbal development for academic coursework in English. For example, a language survey of more than 700 Latino SAT takers revealed statistically significant, moderate correlations (median correlation .35) between students' self-ratings of English academic ability and their scores on the SAT Verbal and the Test of Standard Written English (Durán, Enright, & Rock, 1985). The 11 language survey items that showed a significant correlation probed students' self-ratings of skill in recognizing and using English grammar and vocabulary and in understanding or producing discourse in academic contexts. Two items probing reading comprehension skill showed the strongest association with students' SAT Verbal scores. These items asked students to rate their comprehension of textbook materials ($r=.38$, $p<.01$) and of vocabulary in academic reading tasks ($r=.45$, $p<.01$) on a scale of 1 to 5. Although these correlations are not huge, they are substantial given that they involve only a single, abbreviated question. They are of the same magnitude as correlations commonly found between SAT scores and high school grades with early college grades.

Interpretation of Latino students' college aptitude test scores and high school achievement test scores needs to take into account the possible influence of numerous background and schooling factors associated with students' ethnicity and social history. For example, the number of U.S. Latino immigrants has risen dramatically over the past 20 years. It may be that test scores have failed to rise because more Latinos from immigrant non-English backgrounds are matriculating through the school system (National Center for Education Statistics, 1992). Unfortunately, this hypothesis has yet to be explored empirically.

RESEARCH ON THE ACADEMIC DEMANDS OF READING AND REASONING ACTIVITIES

Given the findings of college admissions test data and educational survey data, how can we better understand factors that influence Latino students' ability to comprehend texts and to reason?

Three issues seem salient. The first concerns the wholistic nature of academic reading assignments and how the nature of assignments influences second language learners' approach to academic language use and reasoning with language. The second issue concerns cognitive and linguistic processing strategies used by second language readers to accomplish specific kinds of problem solving that require the processing of discourse and sentence-level language. The third issue concerns students' fluency in basic decoding of English language words. We deliberately stage this discussion to go from macro to micro concerns so as to avoid the interpretation that the acquisition of basic language processing skills necessarily precedes the acquisition of the language comprehension skills required for making sense of whole academic activities.

The Nature of Reading Assignments

In the everyday classroom, academic reading tasks require students to read textual materials for assigned purposes. These purposes can be quite varied yet interrelated. For example, they can include goals such as understanding portions of a text as part of a homework reading assignment, studying a text for an examination, answering assigned questions based on a text, reading for the purpose of writing a report, and so forth.

Qualitative research on Latino students' classroom interaction has found that the nature of the reading and writing tasks assigned has a strong impact on opportunities for students to develop higher order reasoning skills in language. Moll, Estrada, Diaz, & Lopes (1980), for example, found that the reading, writing, and reasoning demands placed on upper-elementary-grade Latino students in English language arts classes differed dramatically from

class to class depending on whether teachers expected students to practice decoding skills or to author book reports or summaries of texts. Gutierrez (1995) interviewed and observed Latino college students enrolled in remedial English courses. She reported that students were given language arts remedial assignments utilizing prepackaged worksheets and workbooks emphasizing word decoding and grammatical rules. Interviews revealed that, prior to college, these students had not had much experience with academic assignments requiring extensive discussion and reasoning from texts nor with extensive essay writing. Gutierrez concluded that remedial students were ill-prepared for college work, because they had not been socialized in earlier schooling to engage in higher order thinking while carrying out academic assignments. Research on the development of language skills among bilinguals and second language learners supports the notion that language acquisition can occur effectively when learners participate in meaning-making activities requiring rich interaction with more fluent speakers who model appropriate language use (Krashen 1982; Wong Fillmore, 1979).

Taken as a whole, these findings highlight the intimate connection between the students' appropriation of social identities in the classroom and their communicative competence. The findings suggest that exposing Latino students to cognitively and linguistically undemanding activities does not equip them to acquire the communicative competence needed for advanced academic learning. Gutierrez (1995) and Moll et al. (1980) suggest that Latino students exposed to remedial tasks, such as isolated word decoding practice, acquire forms of communicative competence tailored specifically for such remedial tasks, along with self-identities as remedial learners.

We agree with Gutierrez (1995) and Moll et al. (1980) that it is essential that Latino high school students planning to attend college be given significant meaning-making academic assignments requiring high levels of reading comprehension and reasoning from texts. Further, we agree that the development of such skills is inherently a social process tied to students' development of self-identities as advanced learners within the communities of practice arising in the classroom. However, we do not believe that brute exposure to complex and demanding academic tasks will always be a sufficient intervention to accelerate the academic development of Latino students. This is especially true of those Latino students whose communicative competence and classroom self-identity may not match the demands of the college preparatory classroom. We believe that there is considerable value in helping students acquire conscious competence in using important linguistic structures occurring in specific academic reasoning contexts. The next section highlights research supporting this belief.

Cognitive and Linguistic Processing Strategies

Investigators such as Rose (1989) have documented at length the struggle of Latino and other minority background students attempting to make sense of academic reading and writing assignments in college. Like Moll et al. (1980) and Gutierrez (1995), Rose calls attention to the inherently social nature of the development of academic skills. Students need first to acquire a sense of how reading is a transaction between the reader and the author. They need to understand what it means to become partners with the authors they read, with other students, and with a teacher in a sense-making community tied to the academic assignments at hand. In addition, however, Rose cites the need for educators to retain concern for the acquisition of specific linguistic and reasoning skills required by students to comprehend texts in order to complete academic work. What are some of these specific and important demands of texts and reasoning about texts?

Before we address this question, it is important to note that the information signaled in text passages in everyday academic textbooks or other academic materials is conveyed not only through standard prose, but also through graphic and text-formatting devices (Duffy & Waller, 1985). These additional features may include, for example, the table of contents, index,

glossaries, special type fonts to signal introduction of critical new terms, and text boxes, tables, and figures to provide supplemental discussion and illustration of text information. There is no research that we are aware of that investigates Latino high school students' ability to recognize and use effectively such features of texts. Such research seems needed in light of their importance to the communicative competencies expected of learners within classrooms as communities of practice.

Returning to standard academic prose as it occurs in textbooks and other academic materials, we find features of English that often prove problematic for English language learners (Abedi, 1994; Celce-Murcia & Larsen Freeman, 1983):

- low-frequency vocabulary
- passive voice
- lengthy nominal phrases
- conditional clauses
- relative clauses changing given-new and topic-comment relations
- complex phrasing of questions
- abstract as opposed to concrete wording.

Abedi (1994) found that non-English-background students performed more poorly on NAEP eighth grade verbal mathematics test items than did English-background students on test items heavily utilizing the foregoing features of English. The study in question found that elimination of these features led to improved performance on items by both non-English- and English-background students. The study in question merits replication given that the findings reached only marginal statistical significance. Nonetheless, the results suggest that lack of communicative competence involving particular English structures is related to lower academic test performance.

Other research has begun to identify and probe specific linguistic difficulties encountered by students and has also uncovered evidence of adaptive information processing strategies used by students to compensate for difficulties in comprehending reading comprehension test items and academic texts. A study by Durán, O'Connor, and Smith (1988), drawing on the work of Fillmore (1983) and Kay (1987), collected and analyzed protocols from seventh-grade Latino language minority students as they worked sample reading comprehension test items drawn from popular standardized reading tests. Students read English test item passages in a line-by-line manner, and they were asked to reason aloud about what they understood and what might come next in a passage. They were also asked to explain how they picked multiple choice answers to questions based on a test-item passage. Qualitative analysis of students' protocols and responses to the examiner's question-probes showed that students' multiple-choice responses to questions were not often consistent with accounts of how students reasoned as they read. In particular, students' incorrect answers were often strategic. Wrong answers often revealed careful reasoning by students about how to answer questions given what they understood from a text and their assumptions about the meaning of material not fully understood. Students' on-line reading and reasoning performance was found to be affected by their ability to do the following:

1) envision the meaning of a text as a whole;
2) resolve the meaning of individual words and phrases;
3) recognize and reason based on the genre of a text;
4) call up relevant cognitive schemata appropriate for understanding a passage; and
5) recognize grammatical and rhetorical features organizing a passage based on the genre of the text.

Collins and Smith (1982), in a synthesis of reading comprehension research and metacognition, identify specific cognitive strategies used by readers encountering comprehension difficulties along with difficulty carrying out the foregoing processes. These strategies apply to readers regardless of language background:

- ignoring an uncomprehended word, sentence, or relationship and continuing to read on.
- suspending judgment about what a word or sentence or a relationship means.
- forming a tentative hypothesis about a meaning.
- rereading the current sentence or sentences.
- skipping back and rereading text from a previous context.
- getting help from an expert source.

The interaction of specific strategies of this sort with text and learner characteristics has been investigated with ESL (English as a second language) students and non-ESL students at the college level. Goldman and Durán (1988) presented oceanography text passages and passage questions to students taking courses in this subject. They presented passages on a computer screen in sentence segments and tracked students' selection of portions of a text passage to reread. As students made their decision about whether and what to review from a text, they spoke aloud about how they were trying to answer a text question at hand. Analysis of native English and ESL students' protocols and responses to questions and patterns of text search revealed that all students just beginning the study of oceanography read the passage very differently from students with more experience in the subject matter. Beginning students matched the terms occurring in questions with the same terms in a passage when first initiating work on a question. In contrast, students who had studied more of the subject matter were more likely to rely on memory as they began answering questions. Regardless of expertise in the subject matter, ESL students tended to expend more effort on understanding a target passage. These students were more likely to reread a passage and to search through it for specific information that might be relevant to answering a question.

A series of studies by Goldman (1988) investigated native-English-background and ESL students' ability to recall a sequence of ideas introduced in text passages from a psychology text as it unfolded on a computer video screen. Passages were taken from real psychology texts and were modified so as to systematically manipulate the occurrence and non-occurrence of sequential connector terms (e.g., first, second, next, etc.) marking enumeration of ideas in a passage. The results of the research showed that both native English speakers and ESL students used a mixture of three global reading strategies:

a) reading a text all the way through then quitting;
b) reading a text all the way through then going back to reread portions; and
c) stopping and rereading throughout a text.

ESL students, however, spent more time in strategies involving rereading of a text. The results also showed that all students, regardless of language background, recalled passage information somewhat better when it was foregrounded by a sequence marker; however, occurrence or non-occurrence of sequence markers had little effect on the recall of ESL students who were classified as having the least proficiency in English.

Another series of studies by Goldman and Murray (1989, 1992) investigated native English and ESL students' ability to complete cloze items in psychology text passages that required selecting an appropriate logical connector term. The terms signaled additive (e.g., in addition), adversative (e.g., however), causal (e.g., because), and sequential (e.g., next) relations among adjoining clauses. Protocols were collected from students regarding how they made decisions to fill in cloze items. These protocols were analyzed subsequently to gain information about the reasoning of students as they chose an appropriate connector term from a list representing each possible connector type. The results showed that native-English-speaking students were more likely to make a correct connector choice than ESL students and that native speakers also showed significantly higher confidence ratings than ESL students about their judgments for correct responses involving adversative and sequential connectors. ESL students

appeared to be aware of the isolated meaning of alternative connectors outside of their occurrence in a text, but they showed difficulty in identifying the logical relationship required to adjoin clauses in text passages using those same connectors.

Other research on the verbal reasoning of high school students suggests that students show a similar pattern of correct and incorrect judgments when solving conditional reasoning problems, but that non-English-background students do not perform as well as English-background students. Durán, Revlin, and Havill (in press) administered 64 conditional reasoning problems to two groups of 46 ninth-grade students. One group consisted of 28 male and female Latino students who were once classified as limited English proficient, but who were subsequently classified as fluent English proficient and were enrolled in regular English language classes. The second group consisted of 28 male and female ninth-grade students who had never been classified as needing English language services and who had experienced only English language instruction throughout their schooling.

The conditional reasoning problems were presented on a computer screen. Each problem was based on a brief paragraph-length passage. Each passage included a conditional sentence of the form, "If x then y." The last sentence of a passage made an assertion that "x" or "y" was or was not the case. Following their reading of a passage, students were asked to respond *follows* or *doesn't follow* to a conclusion statement incorporating either "x" or "y." The problem set consisted of 16 instances of valid arguments corresponding to *modus ponens* (i.e., given "x," "y" follows) and 16 instances of valid arguments corresponding to *modus tollens* (i.e., given "not y," "not x" follows). Additionally, students were presented 16 instances each of invalid arguments corresponding to the fallacies of "affirming the consequent" (i.e., given "y," "x" follows) and "denying the antecedent" (i.e., given "not x," "not y" follows").

The results showed that all students found *modus ponens* and *modus tollens* problems the easiest and "affirming the consequent" and "denying the antecedent" problems the hardest. The difference was statistically significant regardless of language background. However, the result also showed that all problem types were significantly harder for the formerly limited English proficient Latino students.

The body of work cited above leads to the hypothesis that non-English Latino-background high school students approach solution of some complex verbal reasoning problems in English in a way similar to their English-background peers, but that they encounter additional information processing difficulties. It is important to qualify this hypothesis. Non-English-background students from other cultural and linguistic backgrounds might show a different pattern of performance because of the way in which logical relations are marked in primary language structure and language practice.

How might we develop a more comprehensive theoretical approach to encompass these findings? O'Malley and Chamot (1990), for example, present a theoretical model for acquisition of second language skills tied to language use and study in academic contexts. Their work draws on contemporary cognitive research on metacognition and academic study skills. They call attention to helping second language learners acquire the ability to plan, monitor, and evaluate their academic functioning in a second language. They also introduce an ESL instructional model built around their theoretical analysis. Additional approaches applying cognitive theory to second language learners' reading development are described in Carrell, Devine, and Eskey (1989) and Frederiksen (1987).

Padrón (1986, 1987) has also adopted a cognitive framework for examining academic reading skill development. Her work is especially important to mention because it has involved Latino bilingual education students and non-bilingual program comparison groups. Padrón administered a self-report survey of cognitive reading strategies employed in academic work. She found that the Latino bilingual program students were less likely than other students to report use of high-level strategies such as assimilating to passage events, noting/searching for salient details,

and summarizing. In addition, she found that Latino bilingual students' self-ratings of comprehension strategy improved relative to a control group when students were exposed to direct reading comprehension instruction or to the reciprocal teaching technique for teaching reading comprehension.

Fluency in Decoding of English Words

This paper began with a discussion of contextual sociocultural factors that affect Latino students' performance on academic verbal reading and comprehension tasks. It then went on to discuss research on students' ability to perform academic tasks from a cognitive psychology perspective proposing specific cognitive and linguistic processes that mediate performance on specific high-level comprehension and reasoning tasks. But more needs to said about the processing of individual words in a second language and the importance of students acquiring fluency and automaticity in decoding lexical terms.

One basic point is that reading comprehension involves the construction or semantic interpretation of propositions emanating from a text as it is read word by word. McLaughlin (1988) describes the rich interplay of word decoding, syntactic, semantic, and discourse processing skills required to comprehend texts. He emphasizes the importance of accurate, automated word decoding skills in reading in a second language. Advanced skill in reading comprehension requires that language learners concentrate their attention on building and refining key ideas as they emerge in a text, and this entails fluent, automated recognition of words in order to ascribe them meaning or to interpret their grammatical function.

The acquisition of accurate and automated orthographic and phonemic decoding of English words was investigated by Frederiksen (1987). He used computer games to develop Hispanic bilingual high school students' perceptual word encoding and word pronunciation skills in both Spanish and English. The Hispanic students were identified as scoring as below the 30th percentile on the Gates McGinitie Reading Test, but had average reading ability in Spanish based on the Prueba de Lectura, Nivel 4. One game (SPEED) rewarded students for accurate and fast recognition of target letter clusters imbedded in words in each language. The target clusters for words in a language were systematically picked so as to correspond to recurrent orthographic patterns in each language. The game also presented students with "foils"—words containing letter clusters that were similar to, yet different from, the target cluster students were expected to recognize. The second game (RACER) required that students rapidly decode and pronounce words shown on a computer screen at a pace faster than that established by the computer. Periodically, students were required to confirm that a word that they had just pronounced was one that the computer audio synthesis program pronounced next. Frederiksen found that bilingual Hispanic students' accuracy increased and time to respond decreased on both games over repeated blocks of trials. These findings were also confirmed by computerized pre- and post-game tasks measuring the same skills. A most interesting finding was that experience with games in one language was allied with improved performance in the other language on the separate computerized evaluation tasks—without game experience in this other language. Frederiksen concluded that these latter gains suggest that the cognitive and linguistic processes affected by game experience included general language processing skills that can transfer across two languages as similar as English and Spanish. Frederiksen's research is valuable in suggesting that direct training of specific component skills in reading can be assessed and trained using a computerized system to track students' performance and offering students repeated practice with feedback on criterion reading tasks.

When looking at proficiency in detecting word meaning in English as a second language, McLaughlin (1988) found that even advanced adult ESL readers have difficulty in predicting the meaning of words from contextual cues. He also cites evidence that upper-elementary-grade bilingual readers who had been classified as poor readers were prone to make more errors in detecting word meaning in English than in recognizing the syntactic function of English

words. García (1991) reported a similar finding with Latino bilingual children in the upper elementary school grades. She also found that students' awareness of cognate relationships and non-cognate relationships across Spanish and English words was associated with enhanced skill in accurately recognizing English word meaning (García & Nagy, 1993).

CONCLUSIONS AND CHALLENGES

Based on the review of theory and research findings discussed in this report, it seems fair to state that we are beginning to see the emergence of coherent approaches for understanding the reading comprehension and reasoning skills development of Latino high school students along with directions for the design of interventions. One area of progress involves our understanding of the importance of communicative competence to the development of Latino students' ability to use language within the communities of practice that constitute the classroom and of the importance of students' language and sociocultural background as the source for their adaptation at school. A second area of progress is represented by research on linguistic features of texts, on second language learning, and on the use of specific comprehension and reasoning strategies in performing academic tasks. A third area of progress stems from research on factors affecting the verbal decoding of English words and strategies that might promote automatization of word decoding skills.

Adamson (1993) suggests, among others, that second language competence can be studied from two complementary perspectives. One approach is to study the acquisition of sociolinguistic competence in the second language, and the other is to study psycholinguistic competence in the second language. This perspective is consistent with the review of research provided here. Studies of the development of communicative competence and of academic functioning in real academic activity have relied greatly on ethnography and analysis of classroom discourse. These studies utilize ethnography and discourse analysis methods to examine the sociocultural demands of second language usage in real classroom environments and students' capacity to participate as members of a classroom culture. In contrast, studies of comprehension and reasoning strategies and of word decoding have relied greatly on information processing models of language processing and reasoning that arise within the cognitive system of the individual as he or she pursues well-defined problem-solving tasks. These latter studies most often rely on experimental methods designed to isolate performance differences on verbal recognition and reasoning tasks associated with task characteristics and students' language background.

The biggest shortcoming of approaches investigating communicative competence involving ethnographic methods is that it is very difficult for such studies to be configured in a manner informing the design of educational interventions tied to competence in specific discourse practices. The work of Gutierrez (1995), Moll et al. (1980), and Rose (1989), cited here along with research by Warren and Roseberry (in press) and the Santa Barbara Discourse Group (1994), point to a new direction helpful to framing such research in the future. These researchers have investigated the acquisition of complex literacy skills by students within the communities of practice that constitute students' in-and-out of school experiences. While these studies have provided insights on social negotiation, there is a pressing need for further studies of discourse *genres of competence* that emerge through successful socialization in classrooms. We need to capture better how students are able to acquire whole ensembles of language practice tied to classroom activities that then become genres of student academic competence. We need to ask questions such as the following: How do Latino students acquire competence in participating in critical discussions of subject matter? How do students learn to state and debate positions regarding ideas and concepts? How do students learn to summarize, predict, and analyze academic passages in specific kinds of academic assignments?

The biggest shortcoming of psycholinguistic studies of text comprehension and reasoning strategies is that they involve tasks and materials that simulate rather than sample authentic academic reading assignments. Because of this, their findings may or may not generalize to authentic academic activity. Many adherents to a sociolinguistic perspective emphasizing the importance of the development of communicative competence within communities of practice might dismiss the relevance of cognitive research involving experimental techniques for developing effective interventions. We believe that such criticisms are valuable, but should not dismiss the potential of interventions intended to promote acquisition of specific psycholinguistic skills. We see a need for new kinds of research to investigate the generalizability and applicability of psycholinguistic research findings to the study of communicative competence in classroom communities of practice. The characteristics of such an alternative paradigm for research have yet to emerge fully and deserve close attention.

FOOTNOTE

The term *Latino* is used in this report to refer to persons of Hispanic descent.

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